

must have due consideration with reference to the other schemes for accommodating the occupiers of the "little village" and its neighbourhood with means of rapid locomotion. As the *Times* said recently, the dwellers in our suburban villas will not submit to be passed by and over. "A merchant will not consent that Baywater shall be, according to *Time's* compasses, twice as far from the city as Croydon. We find that country towns left out of the existing lines are compelled in self-defence to get up lines of their own; nor can we expect that the active Londoner will submit to remain behind the provincial in facilities of transit and traffic."

The *Spectator* considers the introduction of termini will greatly conduce to the improvement of London. "It will relieve the principal streets from huge masses of heavy traffic—exchange for the ponderous and obstructive waggon the flying island or subterranean magic car of the railway train; saving hindrance, noise, and mechanical troubles innumerable. It will introduce handsome edifices. It will break up bad neighbourhoods—as this very terminus at Farringdon street promises to do, and give opportunity for remodelling whole districts without special cost; the one operation of improvement becoming a mere incident in the other operation of making the railways. It will shake up the ill-contrived framework of the British capital, suggesting and facilitating other improvements, until railway-traversed London will look back with smiling pity on those days when citizens survived who dreaded lest railway termini should obstruct trade."

The site of Farringdon-market will probably be the great central terminus for all railways proceeding from the north side of London.

RAILWAY JOTTINGS.

At a party for the purchase of Northumberland House is going on between its dual proprietor and the South-Western Railway Company.—The Central terminus, baffled at Hungerford, are negotiating for Waterloo Bridge instead.—A Paris paper states that an advantageous offer made by Englishmen to the cities of Bremen and Hanover now occupies much attention. It consists in establishing between those cities, instead of an iron railway, a railway of wood, which will not cost more than one-third of the price of the former, while the expenses of working the line will be also more economical. The locomotives employed on this line will be upon the system of atmospheric pressure, and will proceed, they say, much more rapidly than steam engines. "The rails will be of beechwood, and rest upon a solid foundation of asphalt."—The *Banker's Magazine*, for October, says, "we are assured, by those on whose opinion we can rely, that the London tradesmen, and, we dare say, those in the large towns also, are beginning to complain that they cannot obtain the ordinary payments from their customers, in consequence of the pressure on the latter for money to meet their railway calls."—The contemplated sale of the Regent's Canal has stirred up opposition on the part of the wharfingers and others resident on its banks, who have organized a committee to watch the proceedings. It was contended, at a meeting held this week, that much capital had been embarked by landowners and lessees, on the faith of the existence of the canal, and that it would be a violation of rights to stop the water-way. A suggestion was made to file a bill in Chancery. Another meeting is to be held at the York and Albany Tavern, Regent's Park, on Tuesday next.—The *Gazette Italiana*, a print published at Paris, mentions three decrees which, it alleges, have been recently issued by the Pope. The first prohibits the construction of any description of railroad in the Pontifical dominions.—The Whitehaven and Maryport Railway lately sustained considerable damage at Micklehampton, between Lowca and Harrington, from a spring tide, which, assisted by a north-west wind, washed over the embankment. The damage is estimated to be from 600*l.* to 1,000*l.* Several hundred yards of the embankment and a temporary sea walling were swept away, and several waggons, besides trucks and barrows, severely injured. Some of the waggons were found at low water mark, others were imbedded in the mud, and a great number of tools are said to be lost. This part of the line has from

the first been deemed by persons acquainted with the locality as an impracticable attempt to control the tide.—A curious calculation connected with the present advertisement fever was inserted last week in the *Inverness Courier*, by which it appears that the *Herald*, *Chronicle*, and *Times*, are each in the receipt of from 3,000*l.* to 4,000*l.* a week for railway advertisements alone.—A correspondent of the *Times* gives four specimens of ubiquitous railway directors. One is director in twenty-three companies; a second in twenty-two; a third in twenty-one; the fourth in twenty. He adds—"We have no right to imagine for one moment that this can be one-half of the undertakings which they patronize as directors; for I have not seen the advertisements of any of the French, German, Irish, nor of one-half of the English and Scotch schemes? What puzzles me is, that allowing that they have nothing else in the world to do, how have they found the secret of being able to attend to even these railways? I fancy that each company must have at least one committee-day per week; so that if an hon. and gallant captain attends those of which he is a director, he must attend very nearly four committees per diem."—An inquiry, which will last a month, has just been opened at the Hotel de-Ville, Paris, and at the *sous-préfectures* of Sceaux and St. Denis, upon the project of establishing a railway round Paris to communicate with all the lines running from the capital.

THE ELECTRIC TELEGRAPH.

At a time when the electric telegraph, which has become a component part of the railway system, is doing wonders and exciting general attention, the following account of an apparatus designed to effect the same end, by means somewhat similar, may not be devoid of interest. It is given by Arthur Young, in his travels in France, more than half a century ago (edit. 1792, v. 1, p. 65). Speaking of Mons. Lomond, "a very ingenious and inventive mechanic," he says, "in electricity he has made a remarkable discovery: you write two or three words on a paper; he takes it with him into a room and turns a machine enclosed in a cylindrical case, at the top of which is an electrometer, a small fine pith ball; a wire connects with a similar cylinder an electrometer in a distant apartment; and his wife, by remarking the corresponding motions of the ball, writes down the words they indicate; from which it appears he has formed an alphabet of motions. As the length of the wire makes no difference in the effect, a correspondence might be carried on at any distance. Whatever the use may be, the invention is beautiful." It is interesting thus to observe the embryo idea, as it were, now it is developed into the adult state of usefulness.

It is only a few years since we saw Professor Wheatstone experimenting and amusing himself as was then said, with the transmission of signals by means of electricity; and now the principle is in operation over some hundreds of miles of country. That it will gradually be brought into general use seems certain. Some of the lines are reducing the charge for sending information by it. On the Blackwall railway, where it was earliest applied, and serves to regulate all the proceedings, it has never failed.

It has been justly said that "the electric telegraph in a few years will bring, as it were, the whole population under one roof, and into one room. The metropolis will instantaneously transmit and receive information from every important point in the island. For every great need or emergency, the very farthest point will soon communicate its tidings or its wants, and will receive immediate reply, announcing the certain arrival of the assistance or commodity required in twenty-four hours. The island will thus become one nervous system, with a scarcely less quick and infallible action than the human frame." Its effect in conjunction with railways in providing for the safety of the community either in the event of internal commotion or foreign invasion is too obvious to need remark."

* An American journal says, the St. Louis papers are celebrating themselves upon the prospects that, when the magnetic telegraph is completed from Washington to their city, they will be able to report the speeches in Congress a few minutes before they are delivered, in consequence of the difference of longitude between the two places!

At a recent sitting of the French Academy of Sciences, M. Arago communicated to the Academy, in the name of M. Breguet, one of the commissioners appointed by the government to report on the electric telegraph from Paris to Rouen, a note on a new mode of transmitting signals. M. Arago says, "it is possible in all weathers to communicate between Paris and Rouen with a single wire, the two extremities of which are placed in a hole or well. No return wire is needed." "We are quite sure," says *Calignani*, "that neither M. Arago nor M. Breguet would have made this communication to the Academy if they had been aware that it has no novelty. What is here announced as new is only part of the telegraphic system of Mr. Bain, which is at work in Scotland, and is patented in France by the purchaser of the invention, Mr. Boggett, of London. Mr. Boggett's telegraph, which works with a single wire, was exhibited here long before the electric telegraph was established on the Paris and Rouen railroad, and as the expense of putting it up is only one fourth of that of the telegraph in question, some members of the Academy of Sciences, and other persons, who saw the model at work, were astonished that a trial on a large scale should not have been made of his plan. Amongst the recent improvements made by Mr. Bain in his telegraph are a rapid mode of communication from station to station of a railroad, still with a single wire, by which means many accidents are to be prevented, and also a very simple mode of printing by electricity any government dispatch."

IRON AND THE IRON TRADE.

THE usual quarterly meetings of the iron masters of South Staffordshire and Shropshire were held towards the close of last week, when the attendance was numerous beyond all precedent. It was at first generally considered that the existing prices would be maintained, but it was soon ascertained that two of the largest firms in Staffordshire had decided on an advance of 1*l.* per ton, and after very little discussion, and a few slight objections, it was generally adopted. At the last of the meetings, held at Dudley, on Saturday, the prices were fixed as follows:—Bars, 10*l.*; sheets, 11*l.* 10*s.*; hoops, 10*l.* 10*s.*, at the works, being 40*s.* higher than those established at the last quarter day, and 20*s.* higher than those fixed at Wolverhampton a fortnight ago.

In the present active condition of the iron trade all facts connected therewith are of importance. Messrs. Short and Mahony, in their circular, give a statement of the exports of British iron from the United Kingdom for the last ten years, from which it appears that whereas in 1835 the quantity of bars shipped was 91,331 tons, in 1844 it had amounted to 230,935 tons. With the single exception of 1839, the progress of trade in this article shews an increase. The years 1843 and 1844 are the most remarkable in comparison, the quantity exported in the former period being 176,149 tons, and in the latter period 230,935 tons. The exports of pig-iron in 1835 amounted to 33,073 tons, and in 1841 to 99,960 tons. The exports of cast-iron have risen from 12,604 tons to 18,969 tons. The exports of cast-iron have risen from 12,604 tons to 18,969 tons. The gross exports (including all descriptions of the metal) amount to 472,023 tons in 1844, against 218,608 tons in 1835; and the whole of the years shew a progressive increase.

RAILWAY CONTRACTS.—On Tuesday last, the directors of the Midland railway assembled at the Derby station for the purpose of receiving tenders for the construction of railways from Peterborough to Stamford, and from Syston to Melton, and for a junction from Sheffield to Manchester. The contract of Messrs. Mawson and Co., of Spital, near Doncaster, to complete the latter in eight months for 12,762*l.* was accepted; and the tenders by Mr. William Worswick, railway contractor, of Sibley, Leicestershire, to form the line from Peterborough to Stamford, a distance of twelve miles, for 47,000*l.*; and a branch from Syston to Melton, a distance of nine miles and a half, for 45,000*l.* were both accepted, and the two lines are to be completed in eight months.